

COMPRESSED AIR VACUUM

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Name of Invention: Smith Air Vac

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## COMPRESSED AIR VACUUM

### BACKGROUND OF THE INVENTION

1. This invention is an air vacuum that hooks up to compressed air as found in automotive repair shops and garages. This vacuum is used for picking up spills such as occur in automotive repair shops. These being engine oil, transmission fluid, antifreeze, gas, water and any other liquids. This air vacuum also picks up dirt and debris besides liquid materials.
2. When working in a mechanic shop, employees always have messes to clean up or work in. This is very time consuming to have to stop and find old rags or kitty litter to throw on oil spills. This vacuum eliminates this problem all together by allowing fast and easy clean up. It doesn't take to much time to hook up the compressed air hose already found in shops and clean up these liquid and dirt messes before they get spread all over the shop work areas.

## COMPRESSED AIR VACUUM

### SUMMARY OF INVENTION

The present invention is a canister vacuum that attaches to compressed air. It works by blowing air down a 1" pipe, which is also the handle of the vacuum, and when the air goes through an air fitting on the end cap of the canister it then blows through a venture Orpheus that is separated by  $\frac{1}{4}$ " to cause vacuum inside the canister. Liquid and debris is then sucked up and because of the baffle deflection inside the canister the debris is deflected back into the bottom part of the canister. The vacuum bag on this particular vacuum is for safety for anything getting sucked into the airway. The vacuum bags are made of paper and are disposable.

It is a principle object of the invention to provide a vacuum the automotive shops in particular can use to easily clean up after spills that happen in these kinds of environments.

It is another object of this invention to allow the user easy disposal of debris and liquid vacuumed up by allowing the canister of the vacuum to snap off of the rest of the vacuum for easy clean up.

It is a general object of the invention to use compressed air to use a vacuum to clean up around shop and garage areas and for purposes described above, which is reasonably inexpensive, dependable and fully effective in accomplishing its intended purposes.

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### DETAILED DESCRIPTION OF INVENTION

This device is an air-operated vacuum used to pick up liquids as well as dry materials in areas such as automotive shops and garages. Operation of this device is as follows. Air at 90 psi is attached to the handle 1, which services an airway to the venturi 2. As air is directed through the center of the venturi 2, vacuum is created inside the canister 6. Liquid and debris is sucked up the vacuum pipe 4, and debris then hits the baffle deflector 3, and then falls to the bottom of the canister 6. The vacuum bag 7 is used to catch some of the debris, which makes its way to the other side of the baffle deflector 3, and also to stop any fast moving debris. There are also attachments 5, that can be changed for vacuuming up different types of debris and liquids. There are clips 8, that can be snapped open to remove the canister 6, for easy disposal of debris vacuumed up.

1. Handle and air input
2. Venturi
3. Baffle Deflector
4. Pipe for vacuum intake
5. Vacuum Attachment
6. Canister
7. Vacuum Bag
8. Clips for holding canister to handle